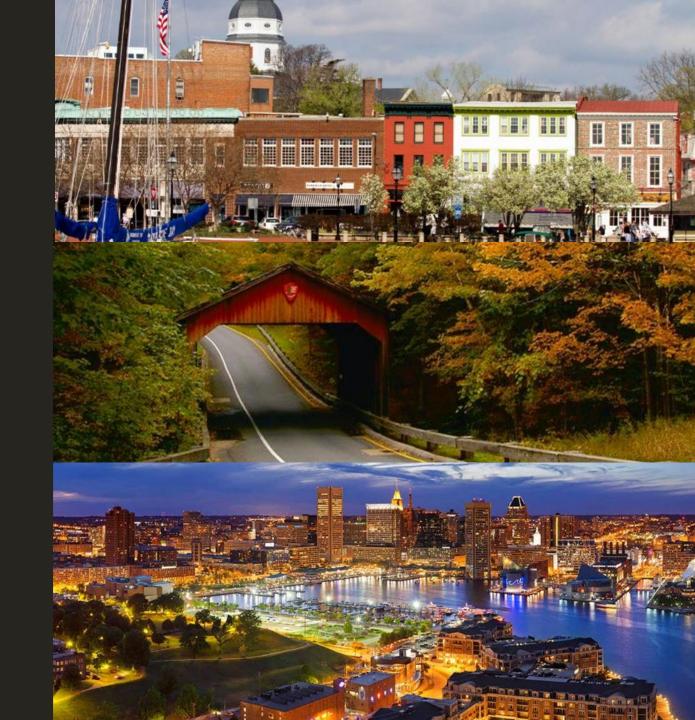


DefTech

Program Overview Date: June 2023



One Air Force, Four Dialects











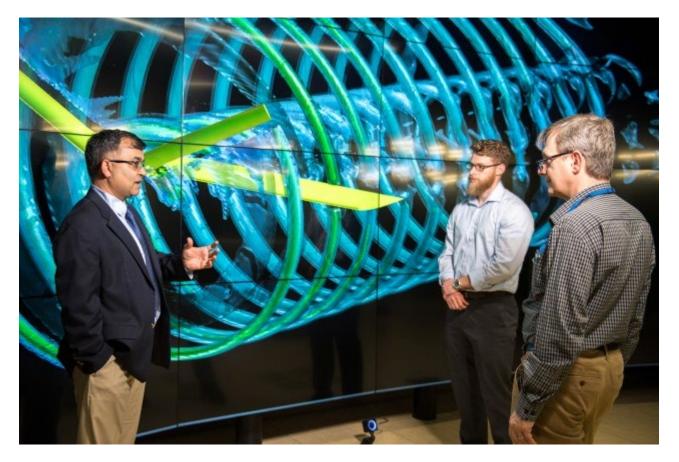
HQ USAFE Intelligence Ramstein Air Base Germany 35th Contracting Squadron Misawa Air Base Japan

35th Fighter Wing Ramstein Air Base Germany Air Demonstration Squadron Nellis Air Force Base Las Vegas, Nevada

TEDCO's Federal Programs



We work with the federal government to convert scientific research into new jobs and new businesses by engaging with research laboratories through programs that help businesses make use of the public investment in science, technology, and innovation.

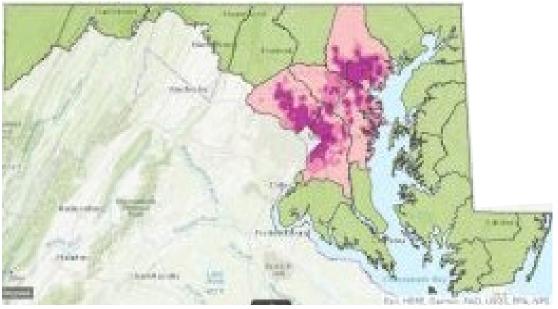


ARL engineers discuss aerodynamics with Uber at the Supercomputing Resource Center at Aberdeen Proving Ground. (CRADA: May 2018)





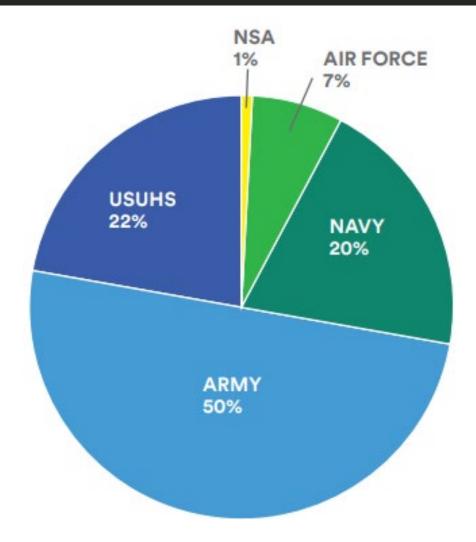
- Established in 2018 as a statewide collaborative of various government, non-profit, and industry organizations, the overall objective of the Maryland Defense Technology Commercialization Center (DefTech) was to promote the commercial use of defense technologies developed in Maryland's Department of Defense labs.
- Since its creation, DefTech has successfully supported the creation and retention of 632 Maryland-based jobs and raised around \$33 million in investment funds.



Why DefTech: Impact by DoD IP Source



- \$69B impact on the US economy
- Data provided by DoD-wide TechLink Economic Impact Study of active license agreements from 2000 – 2021
- 96% of 1,168 companies participated
- 484 companies generated sales attributed to 590 DoD licenses
- NOTE: Does not include sales from Synagis, a product created from one Uniformed Services University of the Health Sciences (USUHS) license, which accounts for 60% of all sales (\$19B)



https://techlinkcenter.org/economic-impact-reports/national-economic-impacts-of-dod-technology-license-agreements-with-u-s-industry-2000-2021



Technology Transfer describes the types of collaborative relationships businesses might have with a federal lab and the mechanisms used to codify those working relationships

- Patent License Agreement (PLA): Secure Intellectual Property Rights to DoD Lab Invented and Patented Technology
- Cooperative Research & Development Agreement (CRADA): Perform Joint R&D on the MD Company's or DoD Lab's Technology
- Test Service Agreement (TSA): Use the DoD Lab as a Third-Party Tester
- Work For Others (WFO): DoD Lab as a 'Contractor' for the Company's R&D Work
- Other Options Available Based on the Branch of the DoD
- Much of this information also applies to other Federal labs

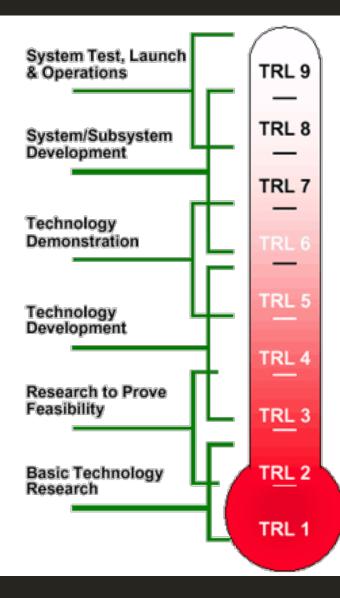




- Goal: drive growth in Maryland's innovation-based economy by helping businesses leverage DoD lab facilities, expertise, and technology.
- Joint initiative between TEDCO, the Maryland Department of Commerce, and the U.S. Department of Defense (DoD).
- Provides proprietary business services to member companies that work with DoD Laboratories.
- Professional services include DefTech Academy, access to technical experts, technology due diligence, business service support, and research tools to support business operations.
- Maryland companies receive the professional expertise they need to work with DoD labs

When (in general) to Engage Based on TRL





Technology Readiness Levels

- TRL 9: Sell to the Federal Government
- TRL 8-9: Test Service Agreement (TSA)
- TRL 6 Cooperative Research & Development (CRADA)
- TRL 3: Tech ready to license (PLA)
- TRL 2

• TRL 4

• TRL 7

• TRL 1: An idea is born ...

Qualifying Businesses for DefTech



- Maryland Business
- Technology innovation-based business (Not just using technology)
- Next Stage is research, development, or testing for a product or service that's reaching a critical inflection point
- Application:
 - DefTech staff interview and an invitation to apply
 - Application includes a slide deck
 - May refer to Prelude Pitch or assist with deck
- Commencement of DefTech services
- Access to DefTech Academy resources



DefTech Offers Connection & Support



- Offer One-on-One Support
- Share Insights into DoD Lab Goals
- Connect DoD Labs with Business
- Educate about How to Work with DoD Labs
- Set Expectations and Discuss Options
- Support Engagement Document Completion
- Teach What and How to Negotiate
- Introduce to Other TEDCO Programs
- Connect to the Broader Ecosystem

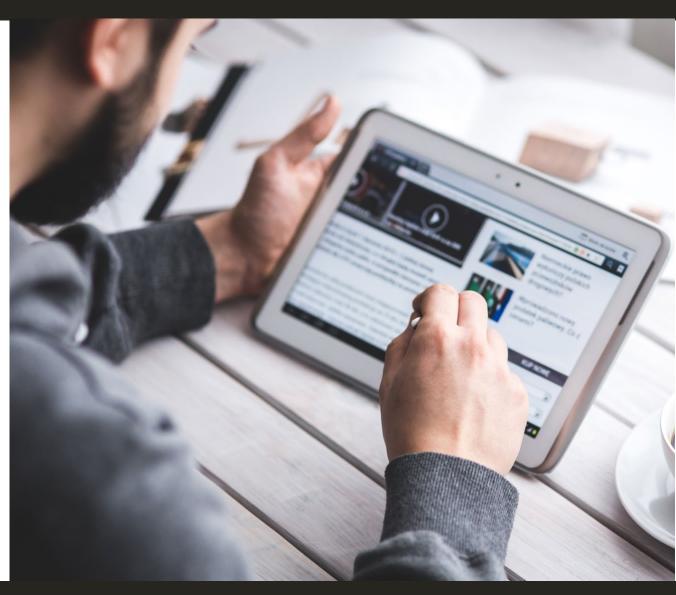


NAWCAD: An MQ-4C Triton is lifted inside Patuxent River's anechoic chamber Aug.12, 2015 for electromagnetic compatibility (EMC) testing.

Connection to TEDCO & the Ecosystem

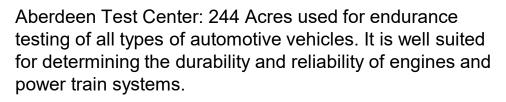


- Investments
- Prelude Pitch
- Marketing Toolkit
- SBIR Proposal Lab
- Network Advisors
- Entrepreneur Expo
- Business Roundtables
- Market Search Databases
- Start-up Orientation Forum
- Maryland Entrepreneur Hub
- Rural Business Innovation Initiative
- Urban Business Innovation Initiative



Examples of DoD Lab Resources

- US Army Medical Research and Development Command
 - Does Breast Cancer Research
- Aberdeen Proving Ground
 - Has a Munson Road Test Course and a Treadmill for Heavy Vehicles
- NAVAIR Pax River
 - Has Climatic Test Chambers Large Enough to Hang Two Aircraft
- Arnold Engineering Development Complex
 - Operates a Hypervelocity Wind Tunnel







Navy's Indoor Ocean at NSWC Carderock



MASK is a massive 360-foot-long, 240-foot-wide indoor ocean with depths ranging from 20 to 35 feet. The 12 million gallons of water it contains are pushed around by 216 individually controlled electromechanical wave boards that line the pool's edge, recreating ocean conditions found around the world.





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